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5 SINGLE CRYSTAL SILICON SENSOR WITH HIGH ASPECT RATIO AND CURVILINEAR STRUCTURES AND ASSOCIATED METHOD

ABSTRACT OF THE DISCLOSURE

In one aspect, the invention provides semiconductor sensor which includes a first single crystal silicon wafer layer. A single crystal silicon structure is formed in the first wafer layer. The structure includes two oppositely disposed substantially vertical major surfaces and two oppositely disposed generally horizontal minor surfaces. The aspect ratio of major surface to minor surface is at least 5:1. A carrier which includes a recessed region is secured to the first wafer layer such that said structure is suspended opposite the recessed region.